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**French et al.**

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(54) **ANTENNA EXTENSION SYSTEM**

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(75) Inventors: **Daniel W. French**, Portsmouth, RI (US); **Theodore C. Gagliardi**, Somerset, MA (US); **Steven L. Camara**, Portsmouth; **John J. Vaillancourt**, Tiverton, both of RI (US)

\* cited by examiner

*Primary Examiner*—Michael C. Wimer  
(74) *Attorney, Agent, or Firm*—Michael J. McGowan; James M. Kasischke; Prithvi C. Lall

(73) Assignee: **The United States of America as represented by the Secretary of the Navy**, Washington, DC (US)

(57) **ABSTRACT**

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An antenna extension system for extending an antenna from an underwater vehicle. The system comprises a housing disposed wholly within the vehicle and a plurality of telescopically connected tiers extendible from a base tier disposed within the housing, an innermost of the tiers being adapted to support the antenna. A cable extends from a base portion of the housing and is fixed at a distal end to the antenna. A plurality of telescopically connected fairings are extendible from the housing and are disposed around the tiers and the cable. A cap is fixed to a distal end of a distalmost of the fairings for enclosing the antenna. Extension of the telescopically connected tiers from the base tier moves the antenna from wholly inside the housing to a position extending outwardly from the vehicle, and extends the cable and fairings with the tiers.

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(51) Int. Cl.<sup>7</sup> ..... **H01Q 1/04; H01Q 1/34**

(52) U.S. Cl. .... **343/709; 343/719; 343/883**

(58) Field of Search ..... **343/719, 709, 343/883; H01Q 1/04, 1/10, 1/34**

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**15 Claims, 4 Drawing Sheets**

